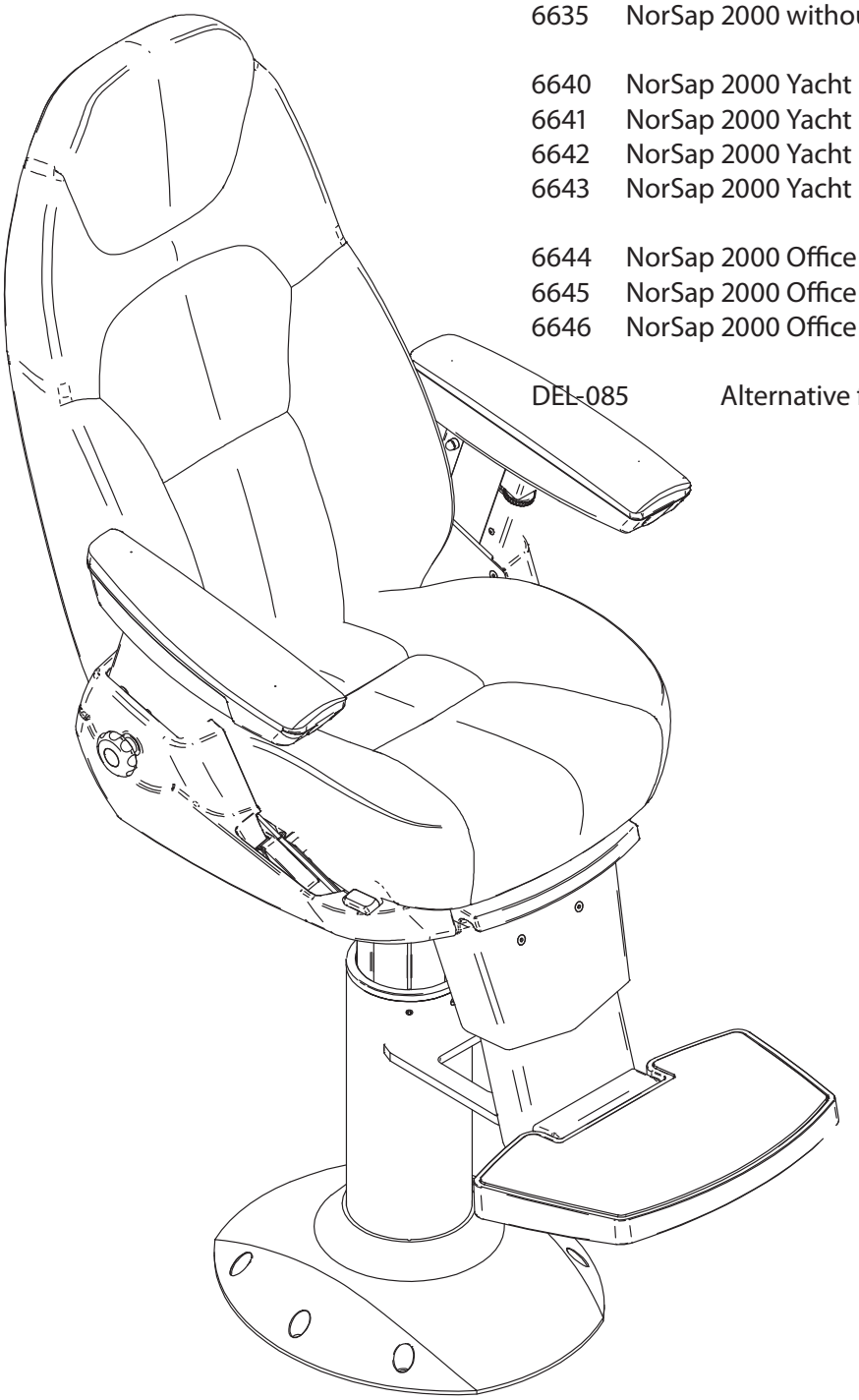
Users Manual
NorSap 2000

March 13, 2012 8:34 AM



This user manual contains the following models:

6630	NorSap 2000 H63-83cm
6631	NorSap 2000 Electrical H63-83cm
6632	NorSap 2000 H73-92cm
6633	NorSap 2000 Electrical H73-92cm
6634	NorSap 2000 Electrical without foot rest H43-50cm
6635	NorSap 2000 without foot rest H43-52cm
6640	NorSap 2000 Yacht H63-83cm
6641	NorSap 2000 Yacht Electrical H63-83cm
6642	NorSap 2000 Yacht H73-92cm
6643	NorSap 2000 Yacht Electrical H73-92cm
6644	NorSap 2000 Office H65-85cm
6645	NorSap 2000 Office H75-94cm
6646	NorSap 2000 Office without foot rest H45-54cm
DEL-085	Alternative foot rest for the NorSap 2000 foot rest

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Introduction

Congratulations with your purchase of a NorSap chair and thank you for your confidence in our company products. NorSap is among the leading producers of helmsmen and operator seats for the maritime market.

This manual will assist you in making the best use of the functional capabilities of the NorSap chair and will ensure you will quickly become familiar with its use. If you have any questions regarding the safe and effective operation of you NorSap chair or accessories after reading this manual, immediately contact our head office marketing department for further assistance.

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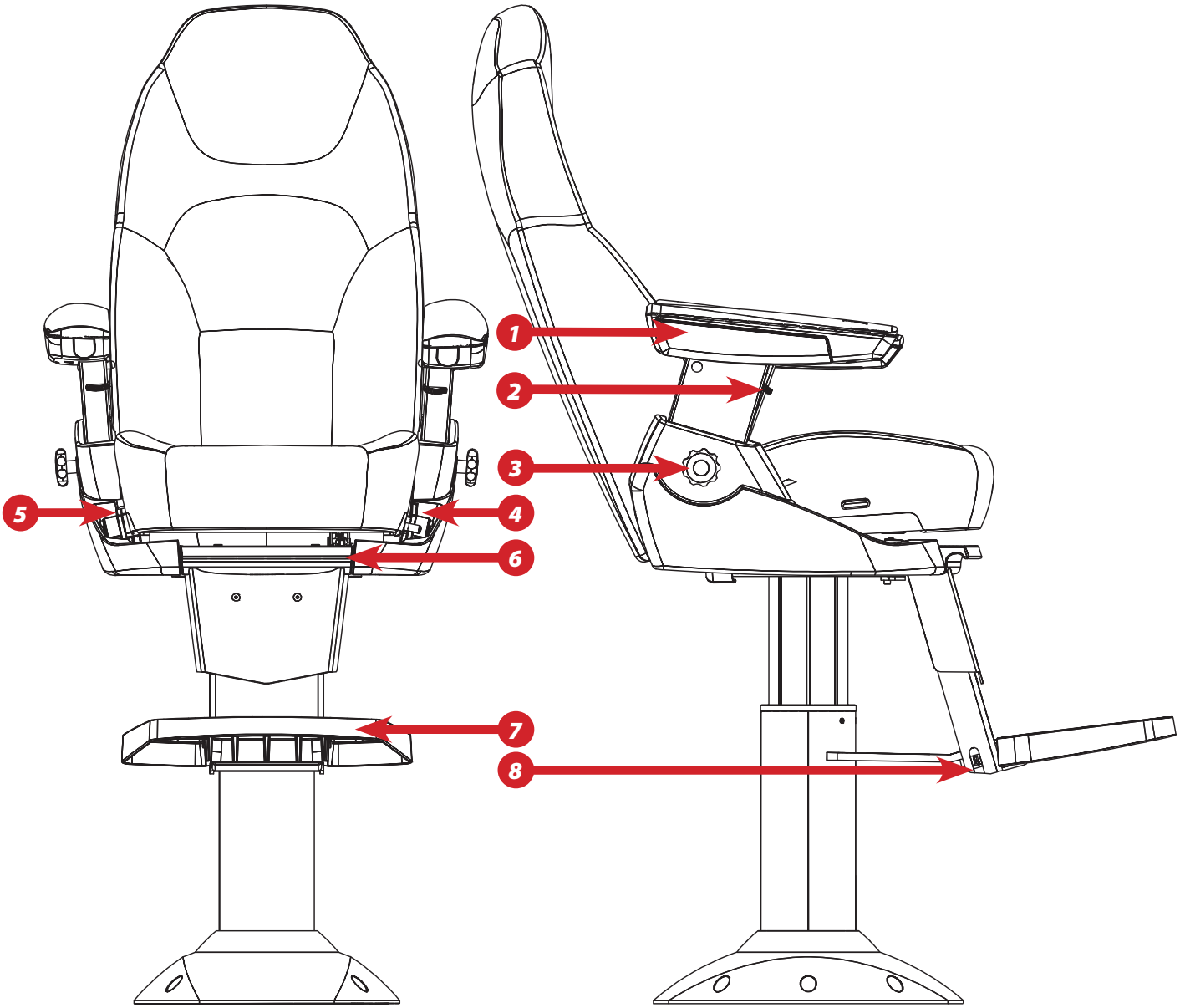
Basic functions of the NorSap 2000 chair

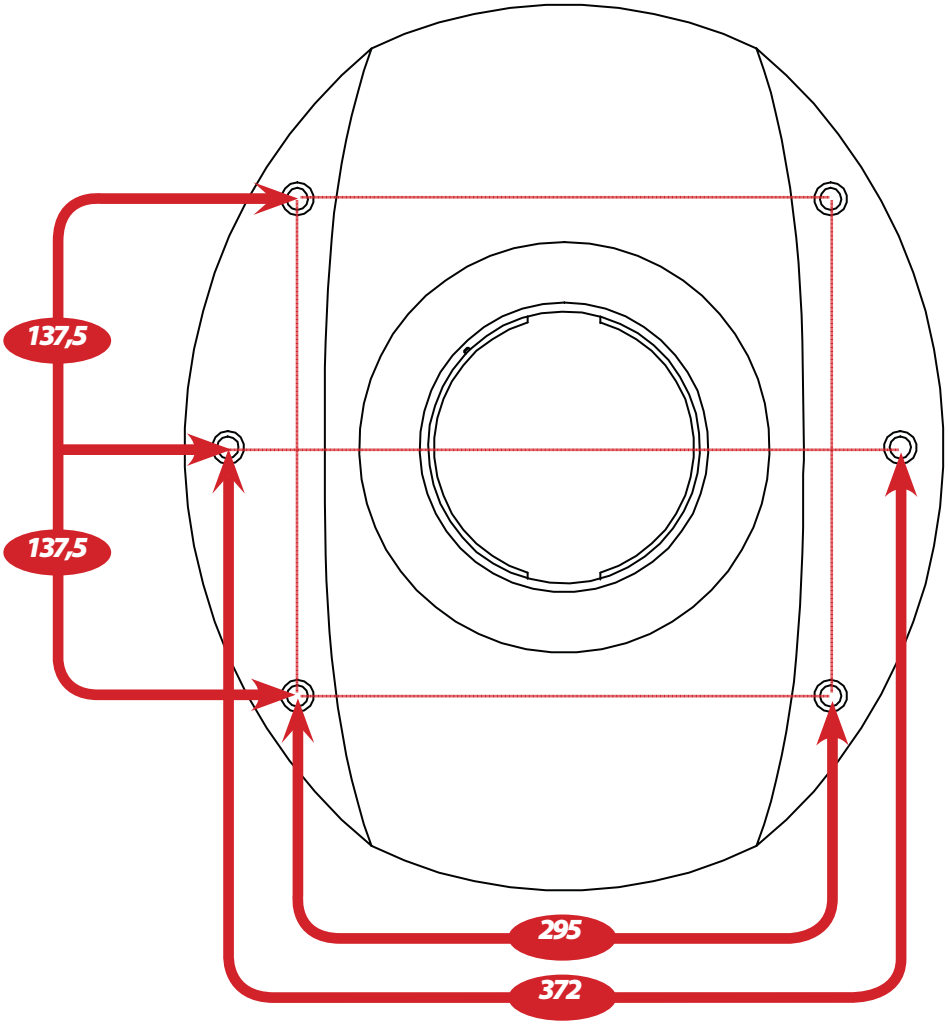


1. Armrest lift and slide adjustments (x2)
2. Hand wheel for tilt adjustment of the armrest (x2)
3. Hand wheel release for height adjustment of the armrest (x2)
4. Back rest adjustment release
5. Height adjustment release
6. Swivel / turn release
7. Flip up foot rest plate
8. Foot rest height release

Mounting holes measurements

A strong and level foundation is required to secure the installation of the base.

It may occur that during storage or transport that the telescope column fastens in the lower position. This can easily be adjusted by fastening the lockable arm for swing, lift up the release handle at the same time pull up the chair.
Use six(6) M-Ø10 bolts to mount the pedestal.



Mounting on a deck rail

First make sure to have mounted the deck rail according to its user manual.

The bolts for mounting the chair to the deck rail is already in place on the carrier wagon.

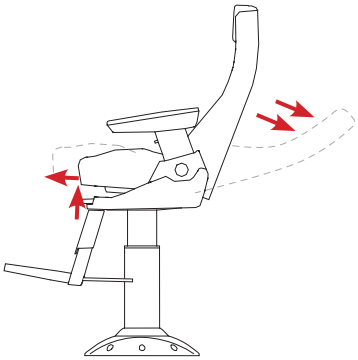
- If you have an electrical deck rail and the cabling of the switch is done by quick-connections already implemented in the chairs column.
- If you have a manual deck rail with release from seated position, the mounting of the release lever is shown in the deck rails user manual.
- If you have a basic deck rail, the wiring and mounting of the release lever is shown in the deck rails user manual.

Replacing seat pillows

If your upholstery is damaged or worn, its recommended to replace the whole part. To re-fit new leather (or other fabric) on existing cushions is not recommended.

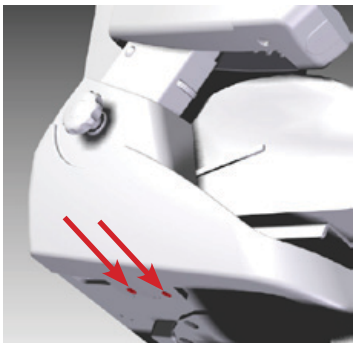
If the chair is intended to be used under extreme conditions, an additional seat cover is advised. This comes in two different materials, water repellent and fabric.

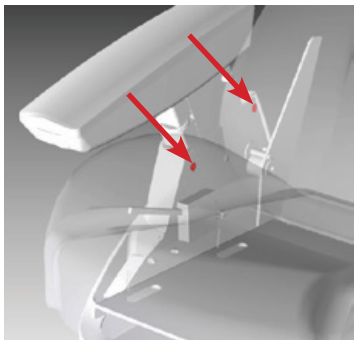
To replace the back rest cushion

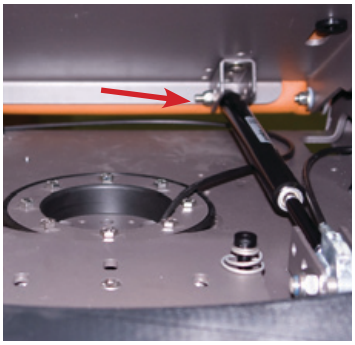


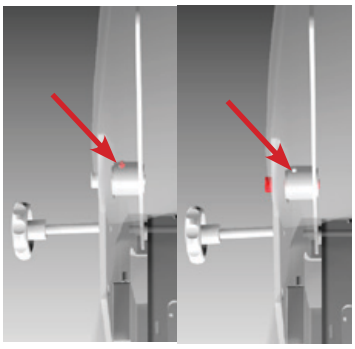
1 - Tilt the backrest to an angle that allows you to reach the bolt marked on the illustrations below.

There are four screws, two under the panel, and two on the backside of the panel (shown with red arrows).
The hand wheels needs also to be removed.







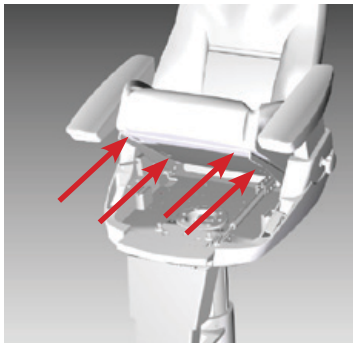


2 - Remove the bolt holding the gas strut in place.

3 - **Remove the locking pin** before dismounting the bolt holding the seat and backrest cushion to the seat frame. You should now be able to loosen the back rest from the seat rest and replace with new one.

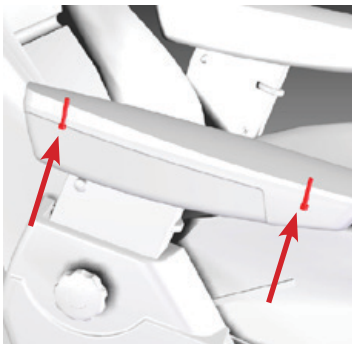
To replace the seat rest cushion

Tilt the backrest to an angle that allows you to reach the bolt marked on the illustrations below. Remount the new seat cushion.



Replacement of arm rest cushion

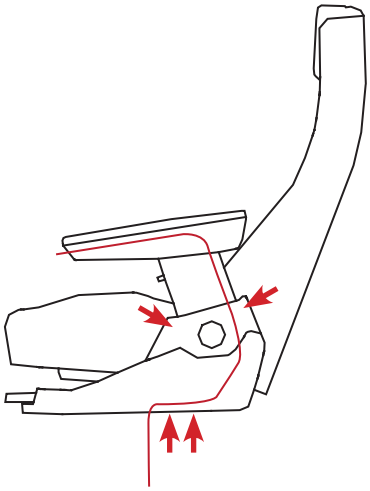
To replace the armrest pillows, use a hex M5 bolt driver to loosen two bolts placed underneath the armrest as shown on the image. Replace with new cushion.



Cabling of extra arm rest equipment

The wires for the extra equipment is concealed as shown on the illustration.

To gain access to the interior the side panel needs to be loosened. There are four screws, two under the panel, and two on the backside of the panel (shown with red arrows. The hand wheel needs also to be removed.

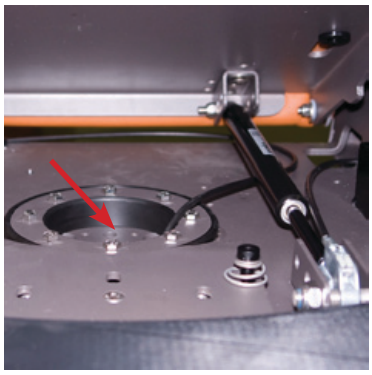


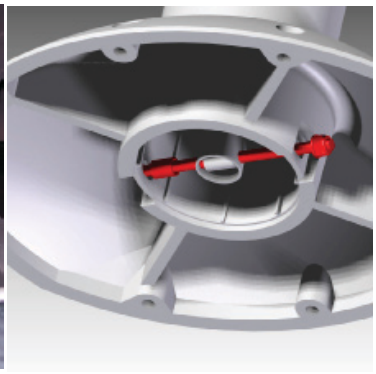
The wire is put through the column top and down to the pedestal. Remember to leave enough wire so that the rise/lower and swivel of the chair is secured.

If the chair is capable of 360° you need to make sure the anti swivel bolt is in place before mounting new equipment, to prevent tear of cables while turning.

Changing the gas-suspension in the column

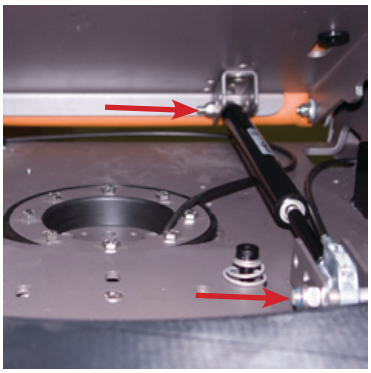
Release the gas-strut top - inside the top of the column by using a 13mm wrench. Release the columns pedestal from its floor/ wagon mounting. Tilt the chair and loosen the bolt shown on the image. Replace and reverse.





Changing the gas-suspension for the back rest

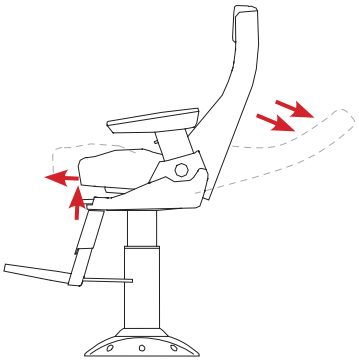
Release the marked bolts on the image, replace with new gas-strut. Be sure to adjust the release wire to a operational function.



Lowering the back rest for in-land shipping

The total height of the chair has the possibility to be reduced by 40cm - pull the back rest release while pushing the back rest back and lift up the seat pillow - releasing further travel of the seat.

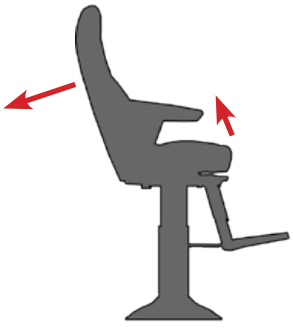
This position is not suitable for operator use
- and should only be positioned when needed.



Replacing the column

To replace the column eight bolts on top of the .

Step 1
Tilt the seat top all the way backwards, you gain extra tilt if you lift up the seat cushion while pulling the backrest adjustment release and the back trest backwards.

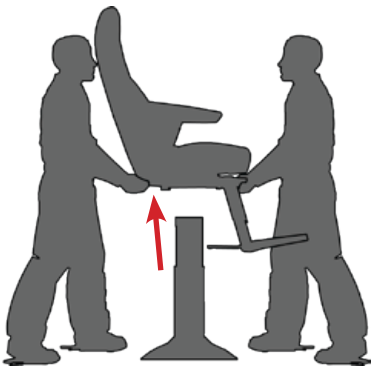


Step 2
Remove the eight bolts indicated 1 on the image.

Remove the wire end of the gas-strut indicated with 2 on the image.

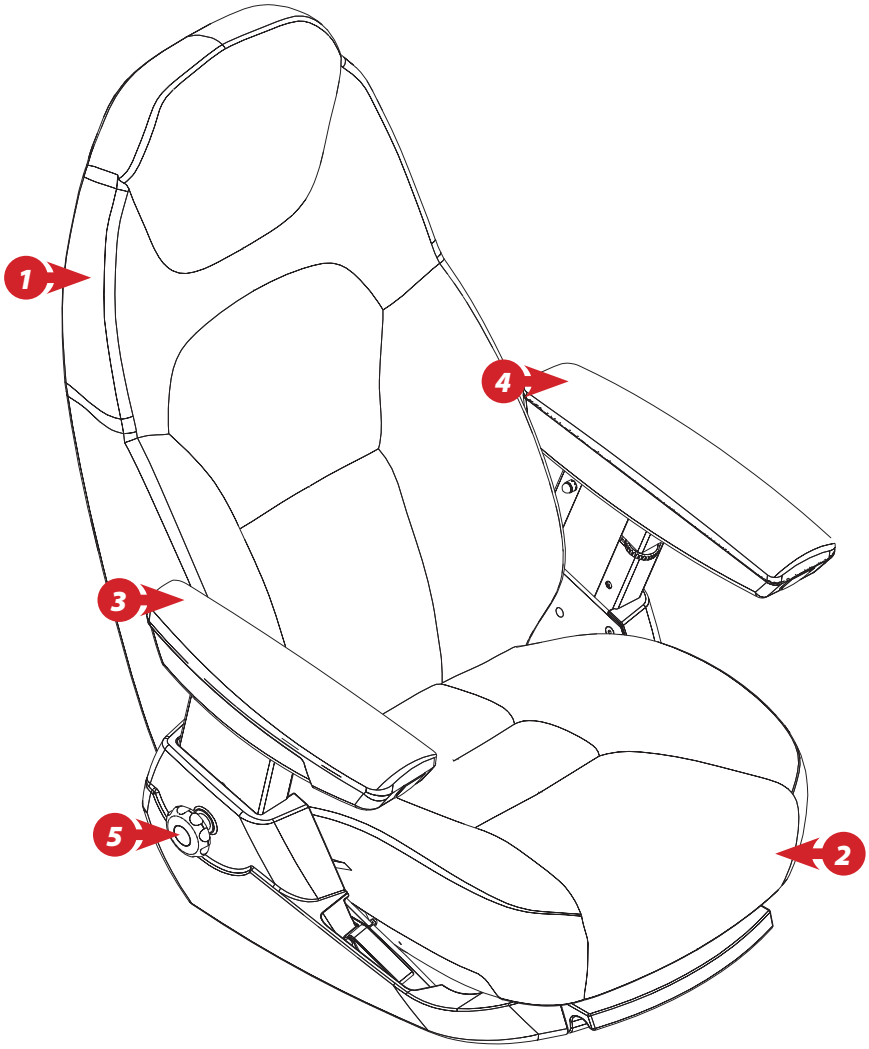
Step 3
Remove the seat top while making sure that the existing roller bolts on the top of the column remains in place.

Reverse order for mounting new column.



After remount function test the height release before finishing.

Detailed Part lists
R-0080 NorSap 2000 seat top part list

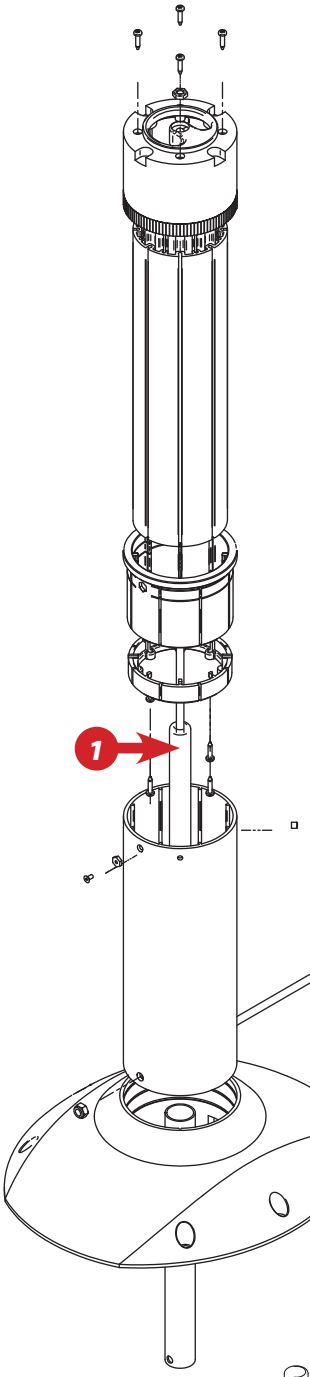


Pos.	Qty	Item Name	Item No.	Rev.	Details
	1	Complete NorSap 2000 seat top	R-0080		
1	1	Back rest	PUTE-080		
2	1	Seat pillow	PUTE-079		
3	1	Complete left arm rest	DEL-3134		
3	1	Arm rest pillow	PUTE-081H		
4	1	Complete right arm rest	DEL-3123		
4	1	Arm rest pillow	PUTE-081V		
5	2	Hand wheel for arm rest adjustment	RATT-029		
*	1	Gas strut for back rest adjustment	GAS-056		
*	1	Wire for back rest adjustment	WIRE-017		

Columns for NorSap 2000 series

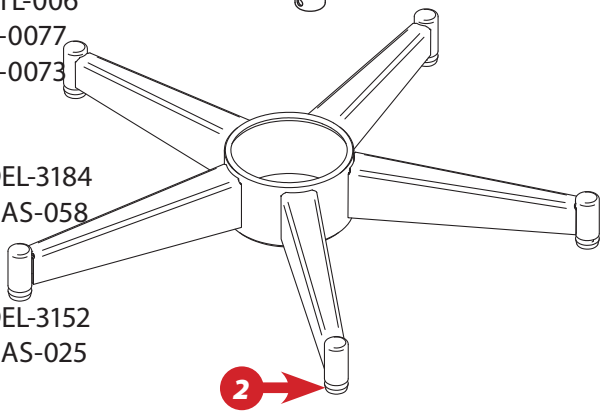
To find out what model your chair is flip up the seat and view the sticker underneath.

Pos.	Qty	Item Name	Item No.	Rev.
		For article no.: **6630, 6640** H63-83cm		
		Complete column H505-700	DEL-1213	
		Complete column Yacht Black H505-700	DEL-1213SO	
1	1	Replacement gas strut	GAS-058	
*	1	Wire for gas strut release	WIRE-014	
		For article no.: **6631, 6641** H63-83cm		
		Complete column H505-700	DEL-3179	
		Complete column Yacht Black H505-700	DEL-3179SO	
1	1	Replacement electrical lift	ELDEL-044	
*	1	Replacement circuit card	ELDEL-055	
		For article no.: **6632, 6642** H73-92cm		
		Complete column H625-800	DEL-1210	
		Complete column Yacht Black H625-800	DEL-1210SO	
1	1	Replacement gas strut	GAS-058	
*	1	Wire for gas strut release	WIRE-014	
		For article no.: **6633, 6643** H73-92cm		
		Complete column H625-800	DEL-3180	
		Complete column Yacht Black H625-800	DEL-3180SO	
1	1	Replacement actuator	ELDEL-044	
*	1	Replacement circuit card	ELDEL-055	
		For article no.: **6634** H43-50cm		
		Complete column H280-360	DEL-3176	
1	1	Replacement actuator	ELDEL-063	
*	1	Replacement circuit card	ELDEL-055	
		For article no.: **6635** H43-52		
		Complete column H280-360	DEL-1216	
1	1	Replacement gas strut	GAS-025	
*	1	Wire for gas strut release	WIRE-014	



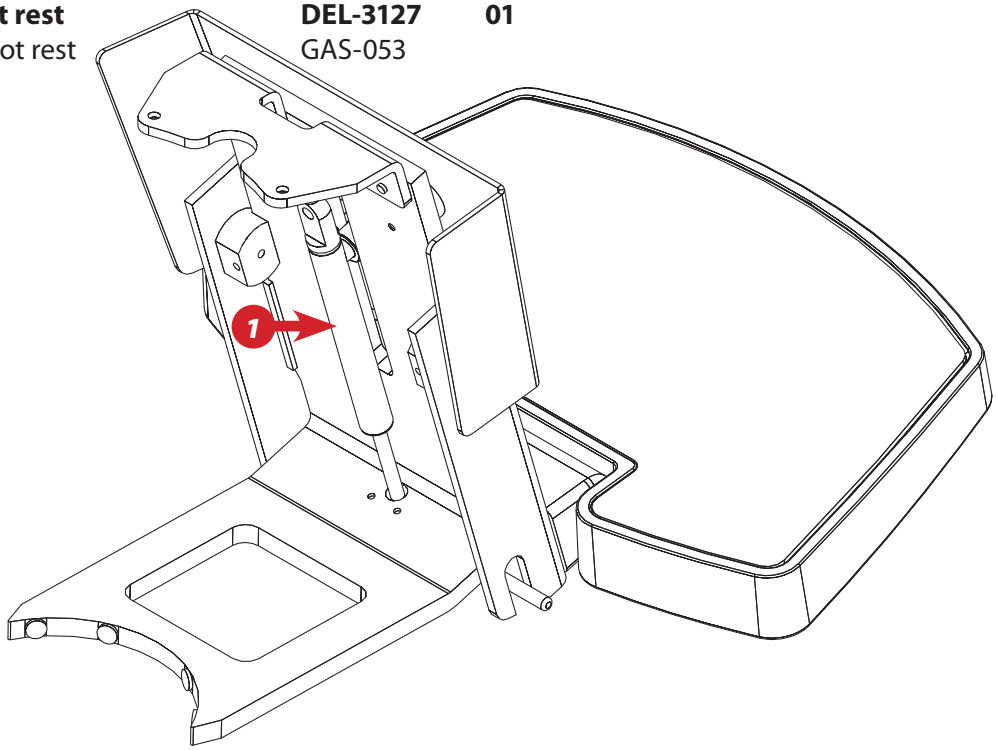
The five star legged versions of the chairs is identical as the ones with flange except for the article numbers and the base and a slightly different height.

2	5	Foot rest padding	STL-006
2	1	Wheel set (5) for Office chairs	R-0077
	1	'Twist-lock' Mounting set	R-0073
		For article no.: **6644** H65-85cm	
		Complete column	DEL-3184
1	1	Replacement gas strut	GAS-058
		For article no.: **6646** H45-54	
		Complete column	DEL-3152
1	1	Replacement gas strut	GAS-025



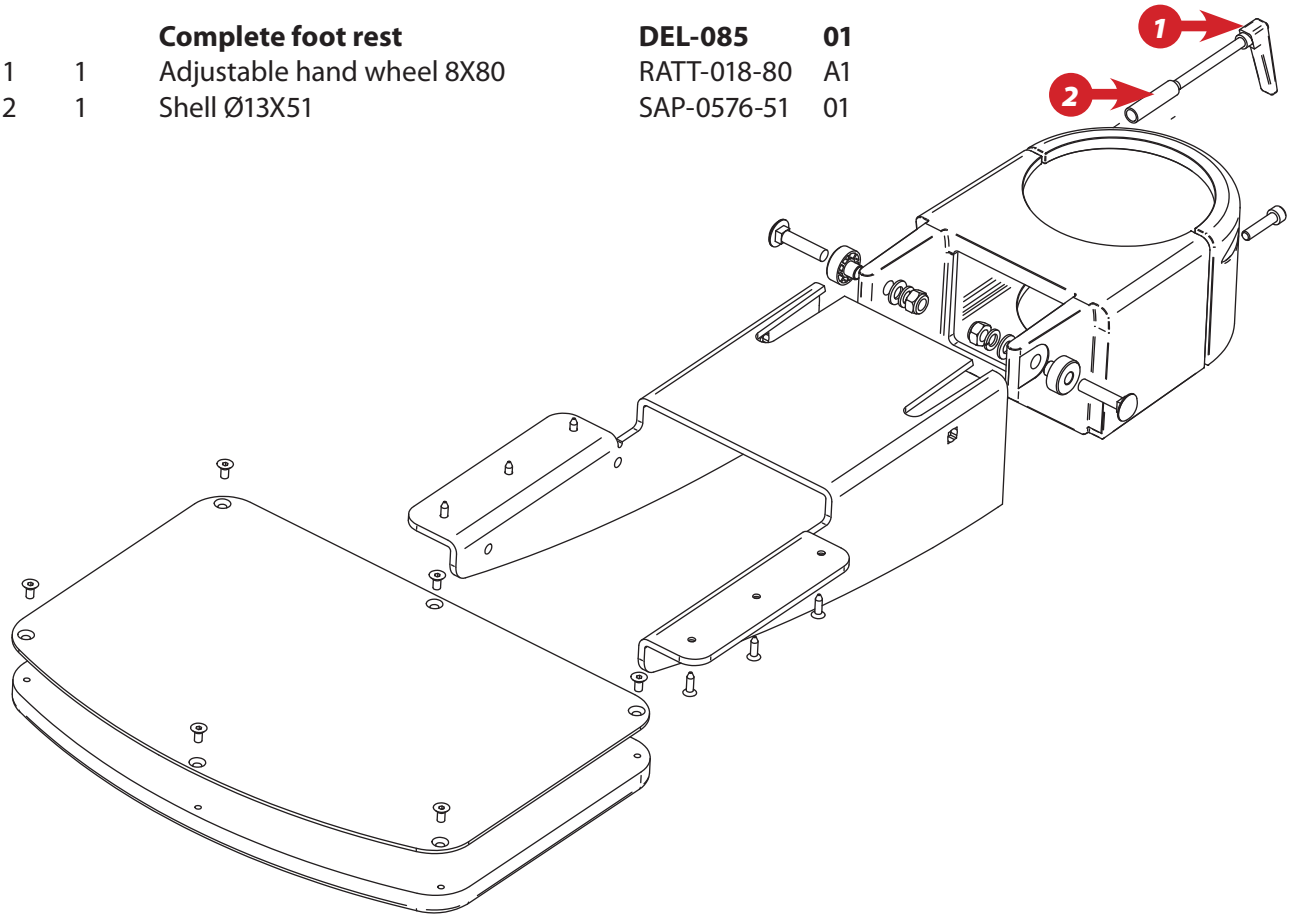
DEL-3127 Original Foot rest

Pos.	Qty	Item Name	Item No.	Rev.	Details
		Complete foot rest	**DEL-3127**	**01**	
1	1	Gas strut for foot rest	GAS-053		



DEL-085 Alternative Foot rest

Pos.	Qty	Item Name	Item No.	Rev.	Details
		Complete foot rest	**DEL-085**	**01**	
1	1	Adjustable hand wheel 8X80	RATT-018-80	A1	
2	1	Shell Ø13X51	SAP-0576-51	01	



Care and maintenance of leather

Most leather qualities have originally received one or another type of surface protection treatment. When the furniture is taken in use, grease from hand and neck will be in contact with the leather on a regular basis. Without proper cleaning the leather will over a period of time leave grease spots or discoloration's. To avoid this clean with Soft Cleaner on a regular basis, we advise once a month. Use Leather Protection Cream or a leather cream with impregnation 2-4 times a year. This will protect against spots, increase wear resistance and preserve the leathers softness. By following these instructions you will ensure a long and lasting leather quality.

Avoid direct sunlight over a longer period of time.
Do not place a heat source within a distance of 20-30 cm.
Remove dust or vacuum, use Soft Cleaner once a month.

Contact us or an authorized leather producer or furniture dealer for more cleaning medium or for further cleaning details.

Preferred supplier of cleaning medium is: Leather Master AS - 6220 Straumgjerde - NORWAY - Tel +47 70 25 35 50 - Fax +47 70 25 35 58 - www.leathermaster.no - service@leathermaster.no

Care and maintenance of fabric

Remove dust or vacuum, use a neutral cleaning agent, such as soapy water when needed.

Maintenance of moving parts

The glide parts of the chair can be lubricated with a silicone based lubricant.
If the chair is on a deck rail, its important that the deck rails railway is NOT lubricated.

Safety

All moving parts has a potential squeezing hazard. Be sure to keep hands and fingers out of moving parts areas when operating the chair.

Shipping and storage specifications

The chair should be shipped and stored in an upright condition.
No other materials should be shipped or stored on top of a the chair or deck rail.

The chair should be shipped and stored at temperatures between -20°C and +40°C.
The chair should not be operated until its been acclimatized between 0°C and +30°C.
The chair should be kept in a clean, dry environment.

Upon receipt, we recommend that the shipping packaging be immediately examined for damage. Any damage should be noted on the delivery receipt and a request for inspection by the transportation company should be made. The shipping packaging should be opened immediately and the chair or the deck rail examined for concealed shipping damage.

**If the chair appears to be damaged,
a concealed bad order report should be
immediately filed with the transportation company.**

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